

WHAT IS CLAIMED IS:

1. A circular saw comprising:

a base member adapted to abut a supporting surface;

an operating arm pivotally mounted to the base member so
5 that the operating arm is circularly moved relative to the base member;

a gearbox formed on a free end of the operating arm, the
gearbox including a first cavity laterally defined in a first side of the
gearbox, a hole laterally defined in a bottom of the first cavity, and a
second cavity defined in a second side of the gearbox and
10 communicating with the hole in the bottom of the first cavity;

a handle extending from an outer periphery of the gearbox
for user to easily operate the circular saw;

a motor laterally securely mounted to the bottom of the first
cavity and partially received in the first cavity in the gearbox, the
15 motor including a teethed shaft extending into the hole in the bottom of
the first cavity; and

a blade device laterally mounted to the second side of the
gearbox, the blade device including an axle rotatably mounted therein,
the axle including a first end extending into the second cavity in the
20 gearbox and a second end centrally secured on the saw blade for
driving the saw blade, a gear laterally securely mounted to the first end
of the axle and engaged to the teethed shaft of the motor so that the saw
blade is rotated when the motor is operated;

whereby the motor is partially received in the first cavity in the gearbox so that the width of the gearbox can be widened whatever the lengths of the toothed shaft of the motor and the axle of the blade device are, that is, the distance between the handle and the housing is
5 elongated.

2. The circular saw as claimed in claim 1, wherein the gearbox comprises a series of apertures defined in the outer periphery of the gearbox and communicating with the first cavity for dissipating the heat from the motor.